

An Interim Judgement on E-Business

Potentials and Risks When Marketing Injection Moulding Machines and Spare Parts on the Internet

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In the past two years digital market places, electronic information platforms and industry oriented web sites have involved themselves in possible forms of e-business with great enthusiasm. Disillusionment is now great. Most electronic market places terminated their activities and terms such as e-commerce and e-business appear at present almost taboo in the industry. E-business activities are generally evaluated extremely critically and quite substantially reduced in times of creeping recession.

Business priorities must be derived from concepts and have clear goals. E-business still has great value when moving from goals to real operations. There are no e-business concepts, only e-business methods. Conceptionally, e-business measures should be firmly fixed in selling activities and advertising measures. E-business is no end in itself. Rather, it supplements and supports classical sales and marketing processes in the enterprise. The contents and methodology of the different e-business components are included in a corporate image that also determines the market appearance of the enterprise.

At Demag Ergotech the different e-business measures are in different stages of realisation. The planned e-business measures will be applied before the end of 2002. Table 1 gives an overview of measures, goals, the target groups that can be addressed and opinions as well as the degree of support for classical marketing channels.

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Plastics machine manufacturers have initiated a variety of Internet-supported marketing and sales activities for new machines and spare parts. New success criteria and the necessity of an integrated e-business concept are the result of two years' experience with the technology and user behaviour.

The management of Demag Ergotech promptly recognised that entrance into e-business can only succeed if optimal methodology is integrated into the different e-business components. E-business advisors play significant roles here since enterprises in mechanical engineering only rarely have the necessary know-how to conceive e-business activities independently. When choosing an advisor one should not try to avoid costs or lead times but rather to utilise the experiences of other enterprises that have already found a support leg in the e-business.

■ Knowledge Management as a Basis

A build up of knowledge management was the beginning of e-business activities at Demag Ergotech. The realisation that operational sales can use only a small fraction of the theoretically available knowledge locally in order to find the optimal problem solution for the customer determined the first step in the e-business concept. Uniform knowledge levels strengthen the product and application competence of all co-workers and are the backbone of all e-business activities. This does not mean providing co-workers with knowledge levels that cannot be applied in daily practice. The goal is to provide the customer on location with a project specific application optimised machine so well prepared that it has a recognisable use and an effective lead over its competitor in the market. This presupposes a pragmatic knowledge level – as well as pragmatic and quick knowledge accessibility – in the marketing.

The main target group of knowledge management is marketing. Essentially, at

the enterprise locations knowledge management is fed by so-called insider circles that define work on special engineering problems and define solutions. The Demag Ergotech knowledge management has a competition database with engineering parameters, a qualitative competition comparison and specifically prepared applications of engineering content to applicable sales arguments (Fig. 1).

The Intranet range of the knowledge management is supplemented by an electronic shop system "Ergostore" that provides information about the product as well as a variety of marketing measures and activities for download and dispatch. This has two purposes. The overall selling structure of Demag Ergotech can be directed by this standardised sourcing of information means with uniform communication conditions. Using an optimised, outsourced process it gathers the marketing material that is ordered.

Canalisation of the knowledge and preparation of operationally relevant information is the nucleus of a flowering e-business concept. Ordered information and product structures help marketing quickly and effectively. In addition to the internal extranet, the Internet provides for a broad transparency of the market achievement profile.

■ Growing Acceptance for Online Bids

So far, on the web sites of the enterprises in the plastics industry the communication structure usually reflects that of printed documents. Certainly, knowledge is prepared to be informative but with no interactive aspects. However, interactive modules make goal oriented activity of the

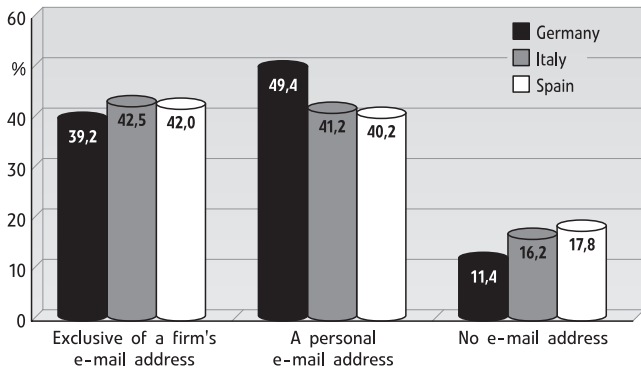


Fig. 2. Accessibility of injection moulding machine purchase decisions by e-mail (Source: Service study, FH Nürnberg 2000)

activities must be regarded as failed despite substantial expenditure for market communication and customer appeal. Based on this experience execution of transactions with standardised, non-modular machines is to be evaluated negatively. The unfavourable economic surroundings finally forced the market place Portax.com to give up. Without it automated initiation and execution of injection moulding machine purchase over the Internet is not promising.

user possible with proposals accurately tailored to his needs. On-line training course registration, machine configuration, product-related inquiry possibilities as well as financing calculators create quick access to the topics that interest the user for the moment.

Use of the Internet and electronic postal services has changed communication in the plastics industry greatly. Presently in Europe less than 15% fail to use this medium. Today nearly all top purchasing decision makers in the industry avail themselves of electronic information means (Fig. 2).

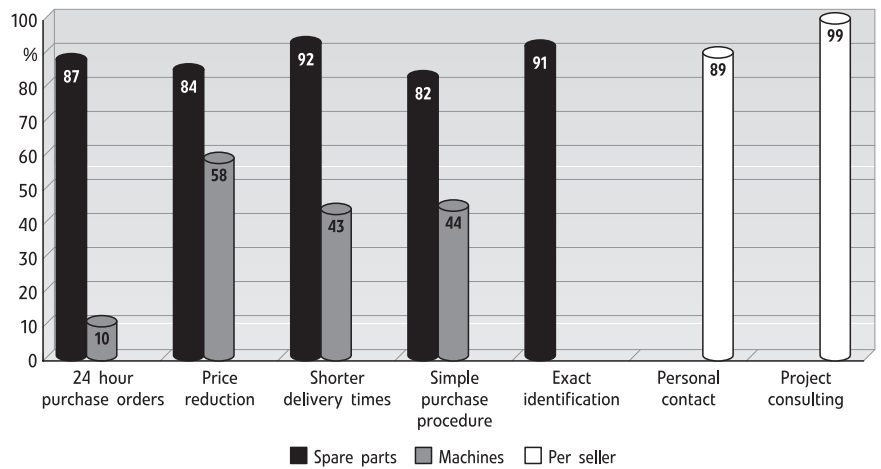


Fig. 3. Success factors for injection moulding machine e-commerce in Germany (Proportion "very important" and "important"; Source: Service study, FH Nürnberg 2000)

New Machine Business on the Internet not Successful

Essentially, the new machine business is not accessible through Internet transactions. No readiness to buy injection moulding machines over the Internet is expressed by 86% of those interviewed by the Technical University of Nuremberg (Fig. 3). The acceptability of buying new machines over the Internet is very low and can only be motivated by a lower price, shorter delivery times and a simpler order procedure.

In an exclusive pilot partnership for marketing Ergotech injection moulding

machines the operator of the market place Portax.com and Demag Ergotech had initiated activities in order to integrate the new machine business into an independent electronic market place for the plastics industry. In addition a machine series ("Ergotech e@se") was presented characterised by a favourable price performance ratio, a high degree of standardisation and a particularly short production time. After six months running time of the project the marketing

Portax.com, Demag Ergotech profited from co-operation with the electronic market place despite the recently failed marketing of new injection moulding machines. The substantial effect for Demag Ergotech concerns knowledge transfer between the market place operator and machine manufacturer. This led to substantial process optimisation in the execution of internal operations and through marketing of a series of machines through a new sales channel to a multiplicity of in-

	Online Shop Machine	Configuration Machine	Customer Catalogue System	Offer Access	Spare Parts Catalogue Machine	Product Catalogue Service
Realisation Date	01/2001	07/2001	09/2001	10/2001	03/2002	05/2002
Goal	Increased market penetration	Increased product transparency	Customer connection, process efficiency	Increased market penetration	Customer connection, process efficiency	Increased market penetration
Target Group	New customers	New customers, marketing	Large customers	Potential new customers	Customers	New customers
Opinions	Performance at a glance, competitively priced replacement parts	Multiplicity of practical machines	Innovative solution models	Flexible design elements	Good price performance ratio, quick purchases	Performance at a glance, competitively priced replacement parts
Sales Support	++	++++	+	+++	+++	++++

Table 1. E-business concept and e-business measures at Demag Ergotech GmbH

quiries through the classical sales channels about modular machines.

Interactive Modules Support Personal Advice

The injection moulding machine business is very strongly personal. Competent marketing consultation is very important for purchase of a machine. A standardised machine order through an electronic function is satisfactory to both parties only if the machine project is planned specifically for the application and the amount of equipment is defined. This must usually take place via engineering consultation, which again can avail itself of interactive modules from electronic databases.

Sales of new machines over the Internet fulfils its goals only if it increases market penetration, that is, its range. It is essential to address prospective customers who have only little or no contact with the classical selling structure.

Obviously no digital market place covers the customer potential of injection moulding processors over a wide range. The only remaining market place Omnexus is still working on increasing its market penetration, in particular in Europe. As already explained, the strategic objective to carry out the machine business via the Internet and to regard this as a separate outlet seems to be unrealistic. Omnexus' idea, to make placement of proposals possible after configuring a machine, is still promising success soon, that is, if access to groups of potential buyers is given. Thus the operational readiness level of the new machine business on the Internet (Fig. 4) would not substitute for the classical outlet, but would flank and supplement it.

Good Potential for Online Spare Parts Business

Internet-supported execution of the spare parts business appears to be the easiest to realise and promises more success than the new machine business. Demag Ergotech pursues two strategic goals for the spare parts business. For well-known customers with existing contact the process is made more effective and identification of the spare parts is accelerated. Thus since March 2001 all standard machines are equipped with a CD ROM with which spare parts can be identified faster and be ordered by e-mail or fax. The sought for spare part can be identified using a freely

selectable search text, a graphically presented selection, the parts list of the design group or input of the function code and/or designation (Fig. 5).

These informations are machine referenced and can be updated at any time so that after an engineering change in the machine the customer can identify and call up the current spare part. Presently on-line accessibility to this information is in the test phase and it will be realised with selected customers in the year 2002. An important weak point in marketing the spare parts business is the misconception that spare parts from the machine manu-

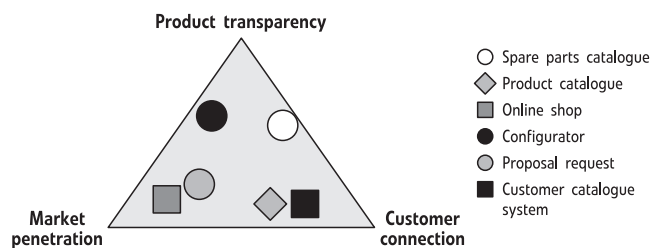


Fig. 7. Evaluation of e-business measures in the injection moulding machine business

facturer are in principle more expensive than those from free producers or dealers. At least the manufacturer can usually offer the spare part more favourably due to its higher part turnover in stock and better product knowledge.

Apart from machine-related, clear identification of a part using the "spare parts catalogue machine" to increase market penetration it is necessary to present the palette of all spare parts in a freely accessible Internet presentation with emphasis on parts that wear outs. Thus with Demag Ergotech a product catalogue for servicing was provided that can be used in a printed version and also in the Internet presentation (www.demag-ergotech.com) (Fig. 6).

Evaluation of E-Business Measures

The central goals attainable through e-business measures are

- ▶ increased market penetration,
- ▶ increased customer connection and
- ▶ reduced process costs.

Increased market penetration is achieved through machine e-commerce and the "product catalogue service". Machine configuration and proposal requests stand for increasing product transparency. Measures for improving customer connection are realised in the "spare parts catalogue machine" and in customer catalogue systems. Taking communication and information behaviour of the injection moulding processing plants into account means that

additions are necessary in order to realise the goals successfully (Fig. 7).

Thus without a printed "product catalogue for service" efficient working of this market segment is certainly not possible since the need for spare parts information cannot be satisfied through electronic media alone. Besides that, increased market penetration depends substantially on how the new information channel is used and on the required performance.

Customer catalogue systems generate customer value if a large number of purchase procedures is standardised thereby allowing process costs to be reduced. The

manufacturer must weigh expenditures for integration against the benefit of greater customer connection and possibly also growing project knowledge. Here investments are to be evaluated critically unless there is a clear desire on the part of the customer to effect volumes of purchase orders via the Internet.

Space and time independent purchasing becomes a reality with machine-related spare parts catalogues. It is not enough to take over the classical order acceptance process. Rather the use of an anonymous medium for order confirmation and determination of supply and service dates must compensate for the weaknesses of the medium in order to give the customer confidence in the execution the process in the future.

The Author of this Article

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Fig. 1. Sales support through knowledge management on the Intranet

Fig. 4. Online request for proposals for products from Demag Ergotech at www.omnexus.com

Fig. 5. Ordering spare parts with the electronic customer catalogue system

Fig. 6. Ordering spare parts through the "product catalogue service"